## **EUROPEAN PATENT OFFICE**

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APPLICANT: NIPPON STEEL CORP:

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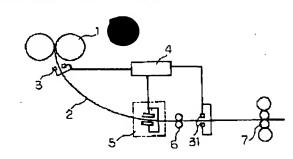
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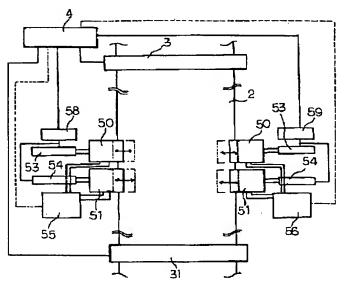
TITLE : APPARATUS FOR UNIFORMIZING

TEMPERATURE IN WIDTH DIRECTION

OF CAST SLAB IN TWIN ROLL

**CONTINUOUS CASTER** 





ABSTRACT :

PURPOSE: To produce a high quality cast slab by calculating cooling rate of the edge parts of the cast slab based on the detected data of temp. distribution in the width direction of the cast slab and cooling the edge parts of the cast slab based on the cooling rate.

CONSTITUTION: In the case of detecting the temp. abnormality on the surface of the edge parts of the cast slab 2 produced with cooling rolls 1 with a temp. distribution detector 3 in the width direction of the cast slab at the inlet side, the temp. difference between the center part of the cast slab and the edge parts of the cast slab 2 in the position of the cast slab is detected as the detected data. Successively, these detected data are inputted with a cooling rate arithmetic part 4 to decide the cooling rate of the edge position of the cast slab 2 and a cooling pattern of a heat conducting cooling rate, etc., is decided with a variable cooling mechanism 5 in consideration of progressing speed of the cast slab. Then, the edge parts of the cast slab 2 are cooled with cooling panels 50, 51 through driving mechanisms 53, 54 controlled with driving control devices 58, 59 while considering the shifting speed of the cast slab 2. The surface temp. distribution of the cooled cast slab 2 is again measured with a temp. distribution detector 31 in the width direction of the cast slab at the outlet side, and in the case of insufficiently cooling, the correction of the cooling rate with the cooling panels 50, 51 is executed and the further uniformity of the temp. can be obtd.

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